Exhibit 3 focuses on the three components of the primary recidivism definition and illustrates the distribution of recidivating activity type.[18] The level of recidivism under each individual primary recidivism definition element is proportional across the CHCs. Supervision violations are the largest type of recidivism behavior, accounting for an average 45 percent of recidivism across the CHCs. Arrests without known conviction dispositions account for an average 33 percent of recidivism events across the CHCs. Finally, new offense re-conviction accounts for an average 22 percent of recidivism events across the CHCs. Similar proportions of behavior types across the CHCs suggest that the results from a recidivism analysis conducted on any one recidivism element alone will produce results similar to those obtained using the combined three elements of the primary recidivism definition.[19]

2. Criminal History Points

Exhibit 4 appears at the end of the report, but its data are displayed in the sidebar graphic to the right. The data reflect the primary recidivism definition. Offenders with 20 or more criminal history points are all grouped into the last category. As the data in Exhibit 4 illustrate, approximately 0.9 percent of offenders in the recidivism study have 20 or more criminal history points.

Percent Recidivating Within Two Years (Primary Definition), by Criminal History Points

SOURCE: U.S. Sentencing Commission, FY1992 Recidivism Sample (U.S. citizens), 2003, weighted data.

Criminal history points represent the purest form in which the guidelines measure recidivism risk. The CHC is not as pure in its form because the CHC is an aggregation of points into one of only six categories. Therefore, the sum of criminal history points is the primary source for evaluating the predictive ability of the current criminal history Chapter Four provisions. Not surprisingly, therefore, when predicting the primary

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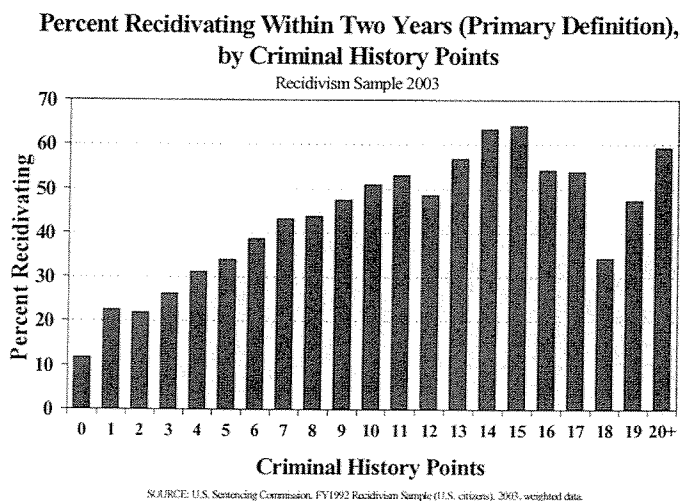
[18]Recall that the three components of the primary recidivism definition are: a re-conviction; a re-arrest with no conviction disposition information available on the post-release criminal history record; and a supervision revo-cation (during either probation or post-prison supervision).

[19]However, analysis using only one of the three primary definitions components is not recommended. Using only one element of the definition reduces the sample size of recidivating offenders, which subsequently increases the rate of error in the indicator chosen to measure the underlying risk for re-offending. Further, analysis using only one recidivism event type (re-convictions only, for example) may find that certain predictors are not statistically significant both because one vent type provides a lower base rate for recidivism and because one event type will provide a more error prone measure of the underlying risk for re-offending.

measure of recidivism, criminal history points also perform well.[20]

Recidivism rates for number of criminal history points also follow the upward positive linear slope trend seen with the recidivism rates of the CHCs. In general, as the number of criminal history points increases, the risk of recidivating within two years increases.

3. Survival Analysis

This subsection of the report focuses on survival analysis methodology and its recidivism findings. Exhibit 5 displays cumulative survival curves for the first two years at risk by CHC.[21] One way to conceptualize this methodology is to imagine federal offenders in the community at risk of committing a recidivating act. As time passes, one or another offender recidivates. The longer the time at risk, the greater the total number of offenders recidivating. A line drawn over time would slope upward to the right, thereby showing the cumulative percent of offenders who had recidivated by each day. This "survival curve" graphs the cumulative probability over time of offenders recidivating. The curves from the recidivism survival analysis have a distinct advantage in showing what happens over each day during the two year follow-up period and the total cumulative percent of each CHC who have recidivated at any point in time.

The survival curves in Exhibit 5 show the cumulative percentage of offenders recidivating in each CHC for each day, starting with the first day at risk. For example, for CHC II offenders at one year (365 days), approximately 13.4 percent had recidivated or conversely, 86.6 percent had *not* recidivated, during the first year (365 days) at risk in the community. Visually following the CHC II's survival curve past 365 days, the curve continues to slope upward. By two years (730 days) the percentage of CHC II offenders recidivating increases to 24.0 percent – almost doubling the rate from the one-year time point for those in CHC II.

The survival curve data in Exhibit 5 show the same pattern of recidivism rates as observed of Exhibit 2. Recidivism rates are lowest in CHC I and rise for each increasing CHC. However, two findings from the survival analysis are noteworthy.

The first noteworthy finding is the striking similarity of the proportional rate increases from CHC I through CHC V. The ratio of the survival curve lines is almost constant: the lines on their graph appear nearly equally spaced as they fan out over the number of days from one to 730. This

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[20]Observed deviations from linearity may be due to insufficient sample size or the correlation of recidivism with other variables not included in criminal history points(e.g., age or gender).

[21]The survival (or hazard modeling) methodology is summarized in Appendix B, with a detailed explanation in the project's companion report, "Background and Methodology of the U.S. Sentencing Commission's 2003 Recidivism Study." The recidivism survival curves presented in Exhibit 5 were generated using a proportional hazard model with the primary recidivism measure regressed on dummy variables representing each of the CHCs. CHC I is the comparison category. This method is described by several experts on survival modeling: Allison 1995; Hosmer and Lemeshow 1999; and Klein and Moeschberger 1997.

"stepping stone" appearance suggests that the first five CHCs clearly delineate recidivism risk by CHC.

A second noteworthy finding is the almost nonexistent difference between the survival curves of CHC V and CHC VI. The lines lie nearly on top of each other, although they do begin to diverge slightly (with CHC VI rates slightly higher) after approximately 600 days at risk.

Statistical tests[22] for differences between the CHCs confirm the visual analysis. The difference in predictive accuracy between CHC V and CHC VI is not statistically significant,[23] while the differences between the other categories are statistically significant.[24] The statistical results of this modeling are reported in the appendix, and specify that there is no significant difference between CHC V and CHC VI in predicting recidivism. This finding is, however, somewhat misleading, because offenders sentenced under the career offender guideline (§4B1.1) and the armed career criminal guideline (§4B1.4) can be assigned to criminal history category VI, even if they have fewer than 13 criminal history points, the minimum number of points otherwise needed for an offender to be placed in category VI. Approximately 145 offenders in the weighted recidivism two year follow-up sample had fewer than 13 criminal history points, but were assigned to criminal history category VI for sentencing. When the hazard model using criminal history categories predicting days until recidivism was rerun for criminal history categories assigned based only on criminal history points, the statistical tests show that all categories are significantly different from one another, including categories V and VI. The results indicate that category VI offenders have higher recidivism rates than offenders in category V. In sum, it appears that assigning offenders to criminal history category VI, under the career criminal or armed career criminal guidelines, is for reasons other than their recidivism risk. The survival analyses described here will be explored further in forthcoming papers.

4. Area Under the Curve (AUC) Analysis

Earlier, in this report's methodology section, an introduction to AUC analysis appears. The AUC method reports prediction power strength[25] for a given criminal history measure, and also permits comparisons of prediction power over alternative measures. This subsection of the report presents the recidivism prediction power of the CHC and of the sum of criminal history points. Analyses for both the primary and re-conviction definitions appear.

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[22]In this statistical analysis, CHC I is used as the comparison category.

[23]$p < 0.05$

[24]$p < 0.05$

[25]Here the AUC statistic technically provides the probability that a prior criminal history measure (i.e., the CHC itself, or the sum of criminal history points) for a randomly selected recidivist will be greater than the same measure for a randomly selected non-recidivist. In the discussion, such a significant relationship is referred to as recidivism prediction.

<u>AUC Criminal History Category Predictions</u>

Exhibit 6 shows the AUC curve generated using the CHC measure to predict the primary recidivism definition within a two year follow-up. The AUC is 0.6786, which is significantly (p<0.05) different from the random model.[26] It is clear that the CHC measure is a significantly better predictor of recidivism than chance.

<u>AUC Criminal History Points Predictions</u>

As discussed earlier, criminal history points are the underlying pure measure of the guidelines' Chapter Four computation. The criminal history points are aggregated into the CHCs, and in so doing, would be expected to lose some of the precision in their predictive power. Therefore, it is appropriate to examine criminal history points as the better predictor of recidivism when assessing Chapter Four's predictive power.

To gauge criminal history points' predictive ability, Exhibit 7 graphically displays the AUC analysis for the recidivism measure of criminal history points. Again, the AUC analysis predicts recidivism during the first two years at risk. The AUC is 0.6992, which is a statistical (p<0.05) improvement over the random model. The conclusion is that the current criminal history points measure is a predictor of recidivism risk. As expected, however, note that the AUC for CHC (0.6786 from Exhibit 6) is less than the AUC for criminal history points (0.6992 from Exhibit 7). This ordering indicates that the criminal history points measure is more predictive[27] and demonstrates that information regarding recidivism risk is indeed lost when criminal history points are converted into CHCs.

E. Summary of Recidivism Prediction Results

Both CHCs and criminal history points predict recidivism, regardless of whether recidivism is measured with the primary definition or by a re-conviction only definition. Exhibit 8 summarizes the prediction for the four empirical groupings that result from two recidivism definitions (primary recidivism measure and re-conviction recidivism measure) and two criminal history measures (CHC and criminal history points).   All four combinations statistically predict recidivism and result in the same analytical conclusions.

However, the most predictive result occurs when criminal history points are the measure used to predict the primary recidivism measure. The AUC for this combination is the highest, at 0.6979. This finding confirms the expectation that the criminal history points measure represents

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[26]The random model defines the likelihood of recidivism at 50 percent – similar to tossing a coin.

[27]Statistical tests show that the ROC for criminal history points is significantly larger at the .05 level than criminal history categories when predicting the primary recidivism measure.

the most accurate predictive instrument. Recall also that the primary recidivism definition has been shown to be the more statistically error free measure of recidivism, minimizing prediction errors.[28]

The analysis indicates that criminal history points have a greater prediction power than do the CHCs. However, the difference in predictive power does not argue for the abandonment of the CHC axis of the sentencing table. Even though the prediction power difference between the two criminal history measures is significant, the CHC provides a simplicity and efficiency that argues for its continued use in the sentencing process. The absolute level difference of prediction power may have a statistically significant import, but the difference is, in fact, relatively small and justifies the practical significance of only a small handful of CHCs.

F. Recidivism and Offender Characteristics

The sections below summarize the variation in recidivism rates based on offender characteristics. The tabular analyses show association between characteristics, but do not imply causation. The recidivism rate patterns observed are typical of those reported in most prior federal offender recidivism research,[29] and reveal associations potentially relevant to policy discussions concerning the guidelines' criminal history measures. Exhibits 9 through 13 cited in this section appear at the end of the report.

1. Gender

Overall, women recidivate at a lower rate than men. Exhibit 9 depicts the percentage of male and female offenders who recidivate within two years of returning to the community. Of the males in the study sample, 24.3 percent recidivate, 75.7 percent do not. Of the females in the study sample, 13.7 percent recidivate, 86.3 percent do not. Again, the rates for males and females increase in the higher CHCs. The difference between male and female rates, however, is not constant. In CHC I through CHC IV, there is never greater than approximately a five percentage point difference between male and female rates. However, in CHC V and CHC VI, the difference between the rates jumps to approximately 15 percentage points.

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[28]Errors in recidivism prediction occur when a model predicts recidivism for an offender and in fact the offender does not recidivate (a Type I error, denoted as α), or when a model does not predict recidivism for an offender and in fact the offender does recidivate (a Type II error, denoted as β). The advantages of the primary recidivism measure in minimizing Type I and Type II errors is discussed in a recidivism project companion report, "Background and Methodology of the U.S. Sentencing Commission's 2003 Recidivism Study."

[29]Harer 1994.

2. Age at Sentence

Recidivism rates decline relatively consistently as age increases. Generally, the younger the offender, the more likely the offender recidivates. Exhibit 9 illustrates the age recidivism trend of the study sample. Among all offenders under age 21, the recidivism rate is 35.5 percent, while offenders over age 50 have a recidivism rate of 9.5 percent.

3. Race and Ethnicity

Exhibit 9 illustrates that the race of the offender is associated with recidivism rates. Overall, Black offenders are more likely to recidivate (32.8%) than are Hispanic offenders (24.3%). White offenders are the least likely to recidivate (16.0%).

4. Employment Status

Exhibit 10 shows that those with stable employment in the year prior to their instant offense are less likely to recidivate (19.6%) than are those who are unemployed (32.4%). The difference between the employed and unemployed recidivating declines in the higher CHCs, until offenders in CHC VI have virtually the same recidivism rate regardless of their employment status in the year prior to their instant offense.

5. Educational Attainment

Exhibit 10 shows recidivism rates for offenders with different educational backgrounds. Overall, offenders with less than a high school education are most likely to recidivate (31.4%), followed by offenders with a high school education (19.3%), offenders with some college education (18.0%), and offenders with college degrees (8.8%). One exception is seen in CHC V where recidivism rates for offenders with a college education (73.3%) are higher than rates for offenders with less than a high school education (50.6%).

6. Marital Status

Offenders who have never been married are most likely to recidivate (32.3%), as shown in Exhibit 10. Those who are married are slightly less likely to recidivate (13.8%) than are those who are divorced (19.5%).

7. Illicit Drug Use

Exhibit 10 demonstrates a relationship between illicit drug use and recidivism. Overall, offenders using illicit drugs within one year prior to their instant offense have a higher recidivism rate (31.0%) than those not using illicit drugs (17.4%). This finding does not hold for CHC V offenders.

8. Guideline Instant Offense Level

There is no apparent relationship between the sentencing guideline final offense level and recidivism risk. Exhibit 11 illustrates the percentages of offenders who recidivated within each offense level grouping. The recidivism rates are essentially the same, regardless of the offender's offense severity under the sentencing table. This relationship is consistent with the principle that the guideline offense level is not designed to predict recidivism, while the criminal history computation is designed to predict recidivism.

9. Guideline Applied for Instant Offense

Exhibit 11 relates the recidivism rate and the guideline driving the sentence for the instant offense. Overall, offenders sentenced under the guidelines for robbery, §2B3.1 (41.2%) and firearms, §2K2.1 (42.3%) are most likely to recidivate. Offenders sentenced in fiscal year 1992 under fraud, §2F1.1 (16.9%), larceny, §2B1.1 (19.1%), and drug trafficking, §2D1.1 (21.2%) are overall the least likely to recidivate. Noteworthy data are seen in the patterns across the CHCs. Even though fraud and larceny offenders had lower recidivism rates in CHC I and II, the recidivism rates for these offenses exceed 50 percent in CHC V and CHC VI and appear sometimes comparable to the recidivism rates for robbery and firearms at the higher CHCs. Additionally, except in CHC I, drug trafficking offenders have the lowest, or second lowest, rate of recidivism across the CHCs.

10. Sentence Type: Probation, Alternatives, or Prison

Exhibit 12 reports that, overall, offenders are most likely to recidivate (25.6%) when their sentence is a straight prison sentence. Recall that straight prison sentences fall within Zone D of the sentencing table,[30] with greater instant offense seriousness implicit. Of those offenders sentenced to a probation only sentence, 15.1 percent recidivate. Offenders serving a sentence of probation combined with confinement alternatives have a similar rate of 16.7 percent.

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[30]Zone D in the sentencing table of Chapter Five Part A requires that, absent departure, the minimum sentence term be satisfied with a sentence of imprisonment (§5C1.1(f)). In contrast, sentence terms in Zones B and C can be satisfied in part with alternative confinement, and sentence terms in Zone A do not require confinement nor imprisonment. Within any given CHC, the sentence terms of guideline ranges in Zone D have the greatest length in the sentencing table, ranging from offense levels 13 and higher for CHC I, to offense levels 6 and higher for CHC V.

11. Length of Sentence Imposed for Instant Offense

Exhibit 12 displays the relationship between the length of the instant offense prison sentence and recidivism rates. The overall trend shows that recidivism has an "inverted U" shape. Recidivism is comparatively low for the lowest sentences (less than six months, or probation), peaks with mid-length sentences (lengths of roughly six months to two years) and then drops for the longest sentences.[31] Among the individual CHCs, however, no discernable trend emerges, although "inverted U" shapes are recognizable in CHC III, CHC V, and CHC VI. Note that for some CHCs, offenders spending "0" time in prison (i.e., probation only or probation with alternative confinement alternatives) have comparatively high recidivism rates. In fact, in CHC I, CHC III, CHC V, and CHC VI, the recidivism rates for "0" prison lengths are often higher than those of offenders who received a minimum prison sentence (one to six months).

12. Departure Status

Panel three of Exhibit 12 displays recidivism rates of offenders by departure status. Overall, offenders receiving a substantial assistance departure have the lowest recidivism rate (17.9%). Recidivism rates for sentences within the guideline range and downward departures sentences are similar (23.3% and 23,0%, respectively). Looking at differences among the CHCs themselves, only the lower CHCs (I, II, III, and IV) have the lowest recidivism rates in substantial assistance departure cases. Downward departure offenders only in the higher CHCs (III, IV, V, and VI) have recidivism rates below the rates for within guideline offenders.

13. Type of Recidivating Event

Exhibit 13 uses a different format from the preceding exhibits. The exhibit reports the distribution of first recidivating events in each CHC. The exhibit addresses the kinds of events that constitute recidivism, and provides this information for all offenders and for each separate CHC.

Overall, probation revocations account for the highest percentage (20.8%) of recidivating events. Across all recidivating offenders, one in five committed a probation violation. However, this finding is in part an artifact of the guideline sentencing structure. There are greater numbers of offenders in the lower CHCs, and those in the lower CHCs are more likely to receive a non-prison sentence, and thus be under probation supervision. It is not surprising, therefore, that only for CHC I, CHC II, and CHC III are probation revocations the most common recidivating events.

For similar reasons, supervision revocations, which are overall the second most frequent recidivating offenses, are the *most* frequent recidivating events for CHC IV, CHC V, and CHC VI.

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[31]Recall the discussion in section A, noting that due to their typically longer prison confinements, fewer of the offenders sampled from the higher CHCs had been released and included in the presented statistics. Follow-up recidivism studies that include more offenders with longer sentences may uncover relationships that differ from those observed at this time.

Those in the higher CHCs are more likely to receive a prison sentence, and thus be under supervised release when returning to the community.

Among the non-supervision re-offending events, almost one in every ten events is a violent crime, and their frequency is comparable across the CHCs. Drug trafficking crimes comprise almost nine percent (8.8%) of recidivating events, with their likelihood decreasing from 11.2 percent in CHC I to 4.1 percent in CHC VI. In contrast, larceny rates increase from a low of 6.9 percent in CHC I to a high of 14.9 percent in CHC VI.

G. Conclusion

Testing of the guidelines' criminal history measure's predictive power shows that the aggregate Chapter Four provisions are performing as intended and designed. Recidivism rates rise as criminal history points increase and as CHCs increase. The empirical evidence shows that criminal history as a risk measurement tool has statistically significant power in distinguishing between recidivists and non-recidivists. Not surprisingly, criminal history points predict better than the CHC. This is because points comprise the raw criminal history calculation. The CHC measure sums the number of points into aggregate categories. For example CHC III contains offenders with four, five, or six criminal history points. It is logical that the points themselves are more predictive than the summed measure. However, the statistically significant difference in prediction between the points and sum measures may not have policy significance. The practical and efficiency advantages of having a small set of CHCs in the sentencing table overwhelm the small absolute increase in predictive power.

The findings in this analysis suggest a number of additional topics that will be addressed in the companion reports from the recidivism project. One example focuses on offenders with minimal prior criminal history. Not only do they have substantially lower recidivism rates, but they are considered less culpable under the guidelines. Possible sentencing reductions for "first offenders" are supported by the recidivism data and would recognize their lower re-offending rates. At the other end of the scale, this analysis finds no statistical difference between the recidivism rates of offenders in CHC V and CHC VI. One conclusion is that these two categories could be combined with no loss of predictive power. Even with equal recidivism rates, however, practitioners and policy makers may identify a culpability difference between offenders in CHC V and CHC VI. Such a culpability distinction might argue for maintaining these two different CHCs.

The recidivism rates associated with offender or offense characteristics also highlight important relationships. One such relationship concerns offense seriousness and recidivism. There is no correlation between recidivism and guidelines' offense level. Whether an offender has a low or high guideline offense level, recidivism rates are similar. While surprising at first glance, this finding should be expected. The guidelines' offense level is not intended nor designed to predict recidivism. Other sets of interesting relationships are those between prior illicit drug use and recidivism, or offender education level and recidivism. If, as the data indicate, abstinence from illicit drug use, or high school completion, reduces recidivism rates, then rehabilitation programs

to reduce drug use or to earn high school diplomas may have high cost-benefit values. Even further, the relationships between recidivism rates and instant offense types are noteworthy. Robbery and firearms offenders have overall higher recidivism rates compared to fraud, larceny, or drug trafficking offenders. However, in the higher CHCs, the recidivism rates for larceny and fraud offenders reach levels almost comparable to the rates for robbery and firearms offenders.

Investigations using the recidivism data suggest that there are several legally permissible offender characteristics which, if incorporated into the criminal history computation, are likely to improve predictive power. Analyses in the recidivism project's report series address the rationale and value of various proposals to modify the current Chapter Four computation in order to increase predictive power. Offender age[32] is a pertinent characteristic. Data from this report indicate that younger offenders are more likely to recidivate than older offenders. Indeed, the U.S. Parole Commission's recidivism predictor, the salient factor score, does incorporate offender age, thus improving its predictive power. A companion report from the recidivism project explores this issue in detail and compares the predictive power of the salient factor score with the guidelines' Chapter Four computation.

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[32]USSG Ch. 4, Pt. A, intro. commentary states that some explanatory variables, such as age and drug abuse, were not incorporated into Chapter Four as recidivism predictors because of policy concerns. However, the guidelines leave open their possible later consideration, stating that the factors were "not included here at this time."

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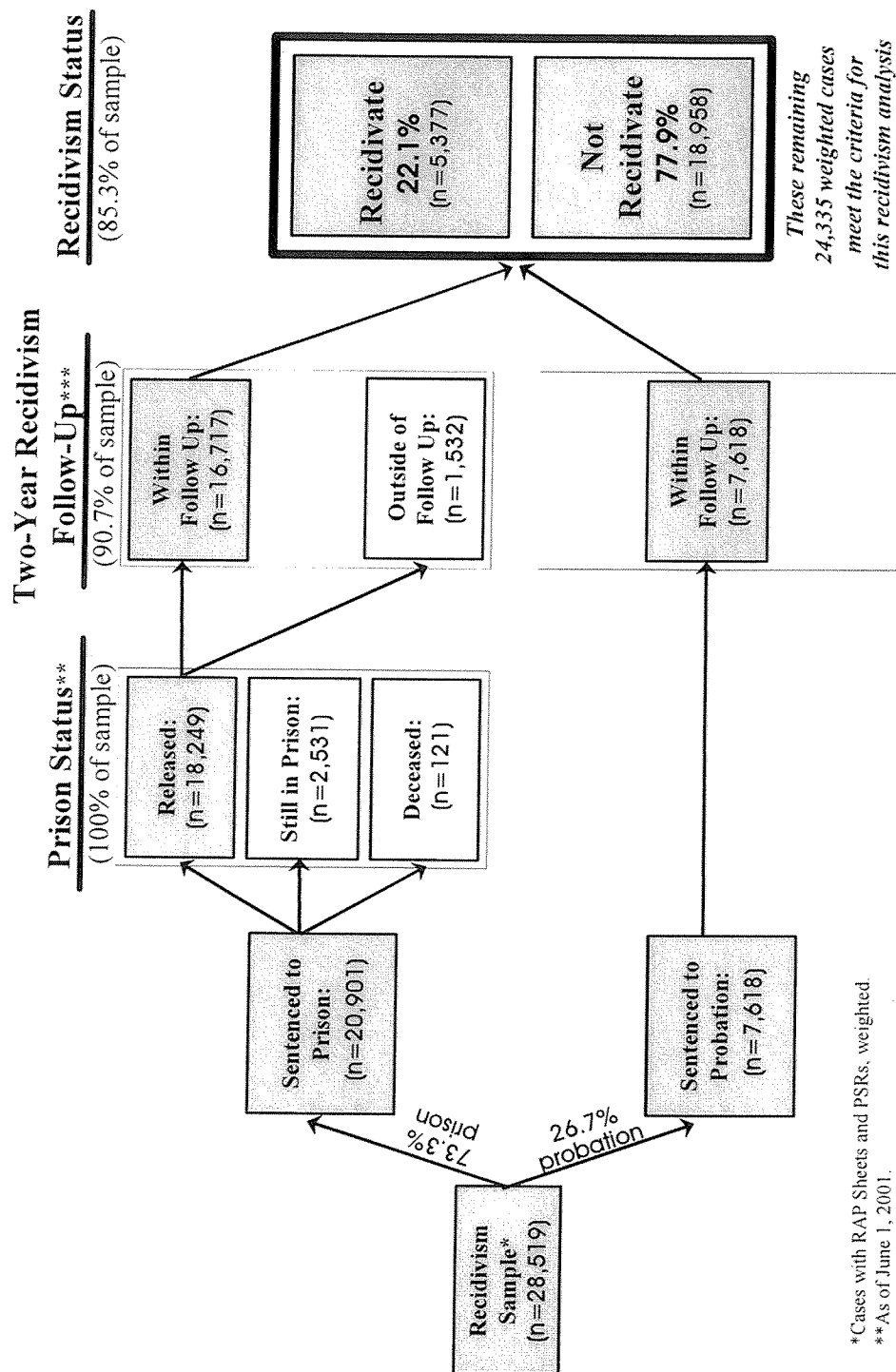Schmidt, Annesley K., and Joel H. Garner.
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Exhibit 1

Chronological Flow Chart of Recidivism Sample

Recidivism Study 2003

Recidivism Status
(85.3% of sample)

Recidivate
22.1%
(n=5,377)

Not
Recidivate
77.9%
(n=18,958)

These remaining 24,335 weighted cases meet the criteria for this recidivism analysis

Two-Year Recidivism Follow-Up*
(90.7% of sample)

Within
Follow Up:
(n=16,717)

Outside of
Follow Up:
(n=1,532)

Within
Follow Up:
(n=7,618)

Prison Status*
(100% of sample)

Released:
(n=18,249)

Still in Prison:
(n=2,531)

Deceased:
(n=121)

Sentenced to
Prison:
(n=20,901)

Sentenced to
Probation:
(n=7,618)

73.3%
prison

26.7%
probation

Recidivism
Sample*
(n=28,519)

*Cases with RAP Sheets and PSRs, weighted
**As of June 1, 2001.
***End of two year recidivism window of opportunity is June 1, 2001.
Source: U.S. Sentencing Commission, FY1992 Recidivism Sample (U.S. Citizens), 2003, weighted data.

Exhibit 2
Recidivism Rates, by Criminal History Category for
Primary and Re-Conviction Recidivism Definitions
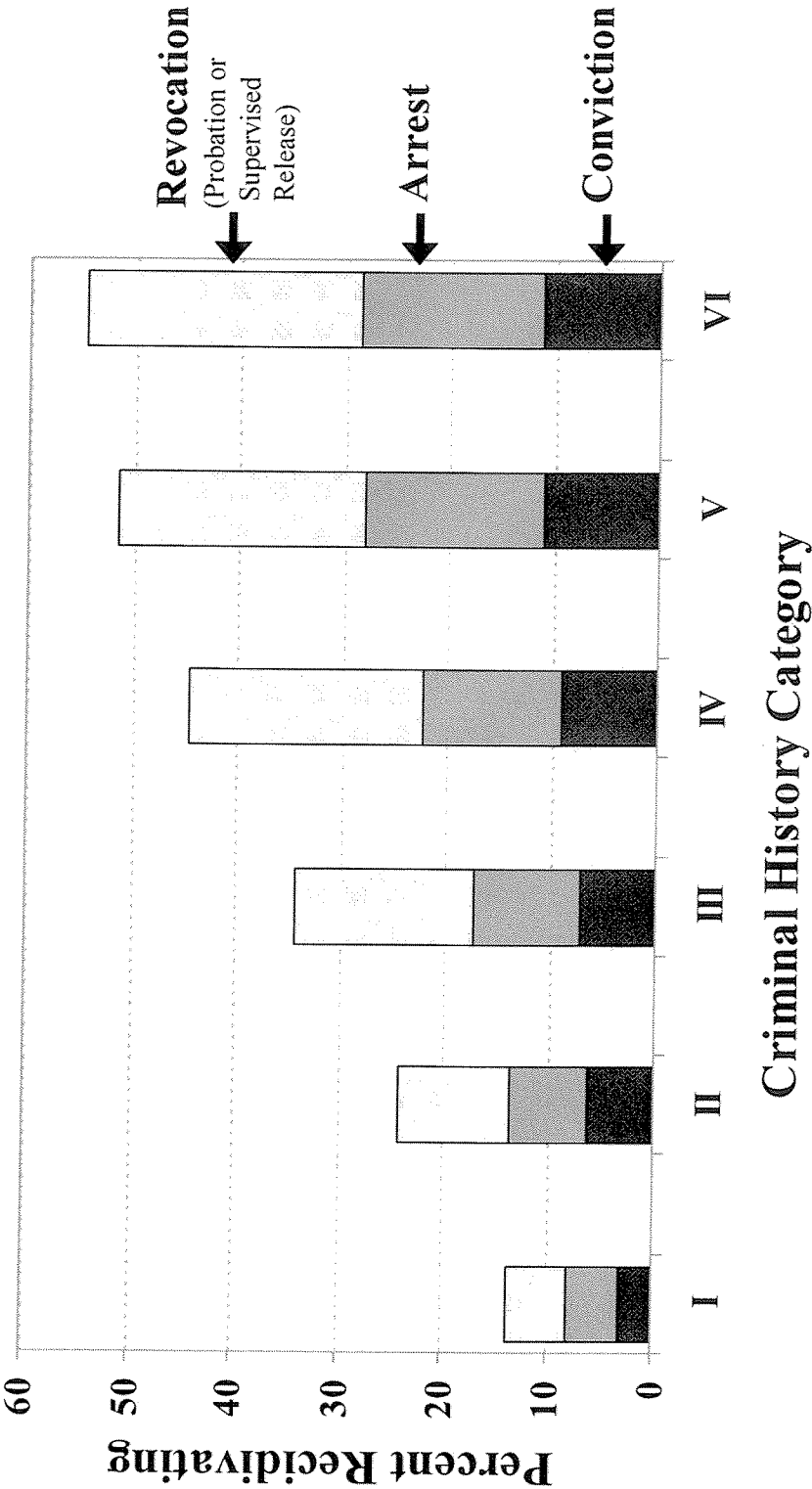Recidivism Study 2003

CRIMINAL HISTORY CATEGORIES

	Total Percent Recidivating	Category I Percent Recidivating	Category II Percent Recidivating	Category III Percent Recidivating	Category IV Percent Recidivating	Category V Percent Recidivating	Category VI Percent Recidivating
TOTAL[1]	24,335	15,429	2,857	2,844	1,359	779	1,067
Primary Recidivism Definition[2]							
Did Recidivate	22.1	13.8	24.0	34.2	44.6	51.6	55.2
Did *NOT* Recidivate	77.9	86.2	76.0	65.8	55.4	48.4	44.8
Re-Conviction Recidivism Definition[3]							
Did Recidivate	6.3	4.0	8.1	9.0	11.5	14.5	14.9
Did *NOT* Recidivate	93.7	96.0	91.9	91.0	88.5	85.5	85.1

[1] Number of offenders with a 24 month period at risk of recidivating following either initiation of probation (for offenders receiving probation-only sentences) or release from confinement (for those offenders receiving confinement sentences).
[2] Primary recidivism definition based on offender's re-arrest, including supervised release/ probation violations, re-arrest, or re-conviction.
[3] Re-conviction recidivism definition based solely on the offender's re-conviction, excluding any supervised release/ probation violations or re-arrests.
SOURCE: U.S. Sentencing Commission, FY1992 Recidivism Sample (U.S. Citizens), 2003, weighted data.

Exhibit 3
Two Year Primary Recidivism Measure Components,
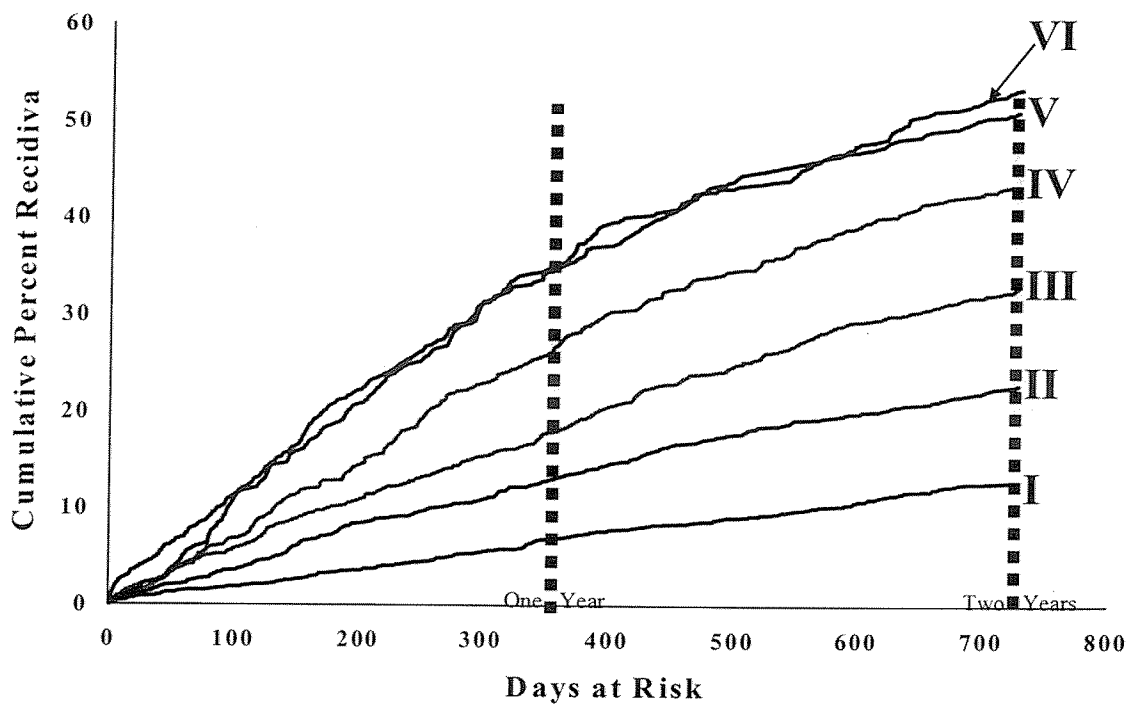by Criminal History Category
Recidivism Study 2003

SOURCE: U.S. Sentencing Commission, FY1992 Recidivism Sample (U.S. citizens), 2003, weighted data.

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Exhibit 4
Two Year Recidivism Rates for Number of Criminal History Points: Primary and Re-conviction Recidivism Definitions
Recidivism Study 2003

Number of Criminal History Points	N	Percent Recidivating *Primary Definition*	Percent Recidivating *"Re-conviction" Definition*
TOTAL	24,335	22.1	6.3
0 points	12,562	11.8	3.6
1 point	2,888	22.5	5.5
2 points	1,274	21.9	7.5
3 points	1,552	26.2	8.5
4 points	1,141	30.2	8.7
5 points	847	34.0	9.6
6 points	921	38.7	8.7
7 points	499	43.3	12.6
8 points	464	43.7	10.5
9 points	431	47.5	11.2
10 points	300	50.9	13.7
11 points	279	53.1	14.0
12 points	249	48.7	14.0
13 points	131	56.8	12.0
14 points	139	63.4	18.1
15 points	136	64.3	18.6
16 points	87	54.2	19.3
17 points	80	53.9	19.7
18 points	73	34.3	11.5
19 points	60	47.4	3.5
20 points or more	222	59.3	18.5

SOURCE: U.S. Sentencing Commission, FY1992 Recidivism Sample (U.S. Citizens), 2003, weighted data. Missing data are excluded, unless specified.

Exhibit 5
Two Year Cumulative Recidivism Rates:
Primary Recidivism Definition
Recidivism Study 2003

SOURCE: U.S. Sentencing Commission. FY1992 Recidivism Sample (U.S. citizens), 2003, weighted data.

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